

REMARKS

This Response is submitted in response to the final Office Action dated August 19, 2005. Claims 1-12, 15-20, 28-35 and 37-49 are pending in this application. In the Office Action, Claims 1-5, 7-12, 15-18, 20, 28-30, 32-35 and 37-39 are rejected under 35 U.S.C. §102 and Claims 6, 19, 31 and 40-49 are rejected under 35 U.S.C. §103. In view of the reasons set forth below, Applicants respectfully submit that the Patent Office should withdraw these rejections.

In the Office Action, Claims 1-5, 7-12, 15-18, 20, 28-30, 32-35 and 37-39 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,380,530 to Hill ("*Hill*"). Applicants respectfully disagree with and traverse this rejection for at least the reasons set forth below.

Independent Claims 1, 12, 28 and 34 are directed, in part, to a coated chewing gum, wherein the coating and gum center both include a metal salt designed to provide breath freshening characteristics. In contrast to the present claims, *Hill* fails to disclose or suggest every element of the present claims.

Hill fails to disclose or suggest the use of a metal salt contained in both the gum center and the coating as required by the present claims. *Hill* is completely directed to a chewing gum that is coated by an emulsion coating having a therapeutic agent such as stannous fluoride (SnF₂). See, *Hill*, Abstract. *Hill* is mainly concerned with using various therapeutic agents in the coating because of the fast release rates for introducing the agent into the oral cavity. See, *Hill*, column 16, lines 22-27. Although *Hill* discloses use of certain zinc compounds, they are only used in the emulsion coatings. See, *Hill*, column 15, lines 20-22. *Hill* fails to disclose or suggest anywhere a metal salt designed to provide breath freshening characteristics within the gum base.

Moreover, *Hill* actually teaches away from the use of active ingredients, such as metal salts, in the gum center/gum base. See, *Hill*, column 9, lines 1-16. For example, *Hill* states "[i]t therefore has been the usual practice in the industry when manufacturing chewing gums having active ingredients to deposit the active ingredient upon the exterior of a gum nugget or center, usually with an underlying thin layer of hard sugar. The outer layer of hard sugar is generally produced by tumbling the units in coating pans into which saturated solutions of sugar are poured and the water driven out by aeration, the finished piece being commonly called "candy coated gum." The use of candy coated gum allows for the dissolution of the active ingredient in the mouth before it is chewed into the gum base." (emphasis added.) See, *Hill*, column 9, lines

1-16. Consequently, for similar reasons, the entire disclosure of *Hill* is directed toward the active ingredient being only in his emulsion coating.

Applicants respectfully disagree with the Patent Office's assertion regarding *Hill* disclosing that the claimed emulsion coatings of his invention can also be present in liquid center chewing gums. See, Office Action, page 2. For example, *Hill* fails to disclose or suggest anywhere that his emulsion coating having active ingredients can be present in liquid center chewing gums. Instead, *Hill* refers to two U.S. Patents Nos. 4,950,479 (“’479 patent”) and 5,057,309 (“’309 patent”) as disclosing *Hill*'s emulsions in liquid center chewing gums. See, *Hill*, column 8, lines 38-44. The ’479 patent and the ’309 patent are directed to the use of the emulsions in a variety of applications. Nevertheless, neither the ’479 patent nor the ’309 patent disclose the emulsions used therein as containing any metal salt, especially the metal salt designed to provide breath freshening characteristics as require by the present claims. Further, the Patent Office has not provided any support to show that the ’479 patent and the ’309 patent referred to by *Hill* disclose emulsions having a metal salt used in a liquid center gum.

Finally, though *Hill* is said to disclose the use of zinc compounds in a chewing gum coating, *Hill* fails to address the use of metal salts in providing breath freshening characteristics. Rather, *Hill* directs its invention, including the use of zinc compounds, to plaque disruption, gingivitis control, hypersensitivity treatment, stomatitis treatment (canker sores) and microbes. See, *Hill*, column 9, lines 19-24, and column 23, lines 54-59. Applicants describe that metal salts bind to volatile sulfur compounds in the mouth that are associated with bad breath. See, specification, page 1, lines 29-31. *Hill* fails to disclose or even suggest this teaching and consequently fails to disclose the use of metal salts in providing breath freshening characteristics.

For the reasons discussed above, Applicants respectfully submit that Claims 1, 12, 28 and 34 and Claims 2-5, 7-11, 15-18, 20, 29-30, 32-33, 35 and 37-39 that depend from these claims are novel, nonobvious and distinguishable from the cited reference. Accordingly, Applicants respectfully request that the rejection of Claims 1-5, 7-12, 15-18, 20, 28-30, 32-35 and 37-39 under 35 U.S.C. §102(b) be withdrawn.

In the Office Action, Claims 6, 19, 31 and 40-49 are rejected under 35 U.S.C. §103(a) as unpatentable over *Hill* in view of U.S. Patent No. 6,030,605 to D’Amelia et al. (“*D’Amelia*”). Applicant respectfully submits that the patentability of independent Claims 1, 12 and 28 renders

moot the obviousness rejection of Claims 6, 19, 31, respectively. In this regard, the cited art fails to teach or suggest the elements of Claims 6, 19, 31 in combination with the novel elements of Claims 1, 12 and 28.

In addition, Applicants respectfully submit that one skilled in the art would not be motivated to modify or combine them to arrive at the present claims. In addition, references must be considered as a whole and those portions teaching against or away from the claimed invention must be considered. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve Inc.*, 796 F.2d 443 (Fed. Cir. 1986). “A prior art reference may be considered to teach away when a person of ordinary skill, upon reading the reference would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the Applicant.” *Monarch Knitting Machinery Corp. v. Fukuhara Industrial Trading Co., Ltd.*, 139 F.3d 1009 (Fed. Cir. 1998), quoting, *In re Gurley*, 27 F.3d 551 (Fed. Cir. 1994).

For example, *D’Amelia* directs its invention to use of copper salts in the gum center only, evidenced by the use of slab/stick gums or bubble gums as carriers. See, *D’Amelia*, column 4, lines 4-17. Though *D’Amelia* discloses use of breath freshening compositions in coated carriers, it only does so in reference to lozenges or tablets, both of which are solid oral carriers. See, *D’Amelia*, column 5, lines 16-43. Furthermore, *D’Amelia* distinguishes between solid oral carriers and chewing gums as carriers. See, *D’Amelia*, column 4, lines 4-7.

On the other hand, *Hill* directs its invention to use of active agents in the gum coating only for quicker and more effect release of the agent into the oral cavity. As discussed previously, *Hill* also teaches away from use of active ingredients in the gum center/gum base, teaching the “major problem” of releasing active ingredients from the gum base. See, *Hill*, column 8, lines 63-68. As a result, one having ordinary skill in the art would not be motivated to combine *Hill* and *D’Amelia* to arrive at the present claims. Consequently, the Patent Office has ignored the portions of the cited references teaching away from the combination while improperly selectively piecing together teachings of each of the references in an attempt to recreate what the present claims disclose.

Regarding independent Claim 40 and Claims 41-49 that depend from Claim 40, Applicants respectfully submit that, besides not being combinable for reasons just discussed, the cited references fail to disclose all the elements of the present claims. For example, *Hill* fails to

disclose or suggest the use of copper salts in a chewing gum coating as required by Claim 40. Though it discusses some zinc compounds, *Hill* makes no mention of the use of copper salts. The Patent Office argues that *D'Amelia* bridges this gap by disclosing zinc alongside copper for use in providing fresh breath characteristics. *D'Amelia*, however, also fails to disclose the use of a copper salt in the coating of a chewing gum. *D'Amelia* discloses the use of copper salts in the gum center only because the reference uses slab/stick gums or bubble gums as the delivery device while making no mention of coated chewing gums. See, *D'Amelia*, column 4, lines 4-17.

For the reasons discussed above, the combination of *Hill* in view of *D'Amelia* is improper. Moreover, even if combinable, *Hill* and *D'Amelia* do not teach, suggest, or even disclose the present claims, and thus, fails to render the claimed subject matter obvious for at least these reasons. Accordingly, Applicants respectfully request that the obviousness rejection of Claims 6, 19, 31 and 40-49 under 35 U.S.C. §103 be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

~~BELL, BOYD & LLOYD LLC~~

BY _____

Robert M. Barrett
Reg. No. 30,142
Customer No. 29156

Dated: October 18, 2005